

INFLUENCE OF PERCEIVED EXPRESSED EMOTION AND AGE ON PSYCHOLOGICAL DISTRESS AMONG PREGNANT AND NON-PREGNANT ADOLESCENTS.

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ABSTRACT

Adolescent pregnancy is a global problem confronting all the countries of the world and it may be harmful to the psychological health of the adolescent mothers. The study examined the influence of perceived expressed emotion and age on psychological distress among pregnant and non-pregnant adolescents. Five hundred and fifty two (552) pregnant and non-pregnant adolescents from Ogun State participated in the research. Perceived Expressed Emotion scale (PEES) and Kessler Psychological Distress scale (K10) were used to collect the data. Three hypotheses were tested with inferential and descriptive statistics. The result found that perceived expressed emotion influenced psychological distress adolescents ($R=0.47$, $R^2=.22$, $P<.05$), pregnant adolescents reported high psychological distress than adolescents who were not pregnant ($t(552)=6.40$; $F=2.15$; $P<.05$), there was no differences in age categories of pregnant adolescents psychological distress. The study recommends that young girls should be well educated on sex education and the consequences of unintended and unwanted pregnancy during adolescence. Also awareness of perceived expressed emotion is important so that parents and family members will consolidate effort that will be geared toward giving adequate support to the pregnant adolescent, so they can still give birth to the child and still find a meaningful future for themselves.

Keywords: Adolescents, Age, Perceived Expressed Emotions, Psychological Distress.

INTRODUCTION

The distress experienced during pregnancy may not probably be easy for some individuals. However, the experience of pregnancy during the period of adolescence may be even harder. This is because the adolescence stage is a stormy period, and the introduction of pregnancy and its related expectations make it even more challenging and distressing. The fact that most adolescent pregnancy is unplanned and unwanted (Sully, Biddlecom, Daroch, Riley, Ashford, & Lince-Deroche, 2019) makes the adolescent experience expressed emotion from significant others which has implications on their level of psychological distress.

Psychological distress is a state of emotional suffering and can result in negative views of self, others, and the environment. It could manifest in the form of sadness, anxiety, depression, distraction, and symptoms of mental illness are manifestations of psychological distress. Psychological distress is a subjective experience, so no two people experience one event the same way (Williams, 2018); the severity of psychological distress depends upon the situation and how we perceive it. Psychological distress is a common mental health problem among the general population and tends to be more common among adolescents (Kessler, Amminger, Aguilar-Gaxiola, Alonso, Lee & Ustun 2007).

Adolescent pregnancy is a global phenomenon that is detrimental to the health of adolescent mothers and is a common public health problem in developed and developing countries, including Nigeria. There is increased awareness that early childbearing has numerous consequences in terms of maternal health, child health, and overall well-being (Firdaus & Mishra, 2020). Adolescents are psychologically vulnerable, and they tend to be sensitive to modifications in their

bodies and appearance; in the adolescence phase of development, young people undergo changes in body image, values, and lifestyle, which make them prone to moving away from the standards established by their parents and creating their own identity.

According to Hall (1904), this development period is a turbulent period where adolescents struggle with identity and other related issues competing for their time and attention. These include their need for growth and development, exposure to social media, peer pressure, and their need to be ahead of their peers (Hall 1904). They generally work hard to achieve success in their goal, while on the other side, they face many problems due to psychological factors such as differences in personality traits, temperaments, and attitude, to mention but a few. Along with these psychological factors are stressful circumstances, such as academic demands, parental pressure, financial difficulties, unwanted pregnancy, and a variety of social stressors, which play an essential role in the experience of psychological distress. Based on those mentioned above, it is estimated that about 4.1 million adolescents aged 12 to 17 meet the criteria for depression and anxiety (National Institute of Mental Health, 2020). Additionally, it has been found that the onset of most psychological disorders occurs during the adolescent years aged 15-24 years (Kessler, Abelson, Demler, Escobar, Gibbon & Guyer 2004). Also, Rana, Smith, & Walking (1999) found that university and college students are more vulnerable to psychological distress than the general population.

Psychological distress can be attributed to several factors, including expressed emotions. Expressed emotion refers to the family environment that is based on how the relatives of the pregnant adolescent talk, respond or react to the adolescent about her pregnancy. A high level of expressed emotion can psychologically distress the pregnant adolescent.

Expressed emotion (E.E.) is the emotion that parents or caregivers express toward the pregnant teenager. Initially, the term was used to measure the emotional response of parents or caregivers toward a psychiatric patient. A high level of E.E. in the home can worsen the [prognosis](#) in several populations, such as maternal E.E. toward children with learning disabilities and family E.E. towards depressive disorders in children and adolescents; it has also been noted that recovery was more common among people with low E.E. homes.

High expressed emotion

Family members with highly expressed emotions are hostile, critical, and not tolerant of the patient. They do this because they feel—they are helping by having this attitude. They usually criticize the behaviours and other personality attributes of the patient/client/pregnant adolescent. High-expressed emotion is more likely to cause relapse or setbacks. The three dimensions of E.E. are hostility, emotional over-involvement, and critical comments.

Hostility

The hostile attitudes of expressed emotion are negative behaviour towards the person with the challenge. The family members blame this person because of the challenge. The family perceives the person as the one who controls the condition's cause. The relatives feel that the pregnant teenager is selfish by choosing that way of life and not seeing it as something beyond her control. The teenager is held accountable for any negative incident within the family and is constantly blamed for the family's problems. They have difficulty problem-solving within the family because the answer to most problems is settled, with the challenge being the cause (Brewin, MacCarthy, Duda, & Vaughn, 1991).

Emotional over-involvement

The relatives usually express their opinion on the pregnancy with emotional over-involvement. They blame themselves for everything instead of the pregnant adolescent, thereby accepting the blame as their inability to protect their innocent adolescent that may not know the consequences of the action.

Emotional over-involvement demonstrates a different side than hostile and critical comments but is similar to the negative effect that causes the problem. The relative becomes so overbearing that the patient/client can no longer live with this kind of stress from pity and falls back into their problem as a way to cope (Lopez & Nelson, 2004).

Critical comments

The critical attitudes of expressed emotion are combinations of hostile and emotional over-involvement. The family members are more open to viewing other aspects contributing to the behaviour. These attitudes are more open-minded than the previous ones because they view more than one cause of the problem (Brewin et al., 1991). However, there is still negative criticism even though the relatives view and accept other contributions. Critical emotions from siblings and parents cause future and increasing problems for the patient/client. Critical parents influence their children to feel the same about the problem (Bullock, Bank, & Buraston, 2002).

Low expressed emotion

Low-expressed emotion differs from high expressed emotion in that the relatives are more conservative with their criticism. Relatives feel that the family member does not have control over the challenge and sympathizes with them. This is because there is also more information about the challenge in which some relatives have more knowledge of the problem than others, which makes them more understanding and less critical. The relatives may criticize the problem and the behaviour, but they do not always express it towards them (Wendel et al., 2000). Low-expressed emotion is usually less stressful to the patient/client than high-expressed emotion.

Conversely, it is essential to note that even though pregnant adolescents are exposed to similar challenges or experiences, their physical and emotional responses to the experience (i.e., psychological distress) may not be the same. Therefore it is safe to say that the outcome of their experiences is a function of their inherent attributes, such as personality and their perceptions of the emotion expressed toward them by people around them. This is the focus of this research.

Statement of Problem

Adolescent is at greater risk for psychological distress, especially during the transition to motherhood. The psychological impacts of adolescent pregnancy include an interruption in education, an inability to attainment of individual goals, and a lack of parental support when they are emotionally, physically, and psychologically vulnerable (Kalil & Kunz, 2019). Freitas, Neury, & Botega (2008) gave evidence of psychological distress among Brazilian pregnant adolescents. They conducted a case-controlled study to compare the psychosocial profile and suicidal behavior of 110 pregnant and 110 non-pregnant adolescents. The findings indicated that adolescent pregnancies were associated with: substance use, low levels of social support, depression, traumatic life events, and other psychological difficulties. It has been documented that perinatal depression is more prevalent among pregnant women and nursing mothers who are adolescents than their older counterparts (Akella & Jordan, 2015). Pregnant adolescents are susceptible to depression due to the mental stress and psychological difficulties they are exposed to during pregnancy (Ayamolowo, Olajubu & Akintola, 2019).

Adolescent pregnancy is a global occurrence, with about 21 million adolescents aged (15-19) having babies annually (WHO 2019). However, in Nigeria, 23 percent of girls aged 15 to 19 years have started childbearing, about 400,000 unplanned births occur annually in Nigeria, and half of these births are to adolescent girls between ages 15 and 19 years (National Population Commission 2022). Adolescent pregnancy is associated with many negative consequences for both the mother and the child, and unwanted pregnancy can be detrimental to the psychological health of the mother and child. In many parts of the world, including Nigeria, adolescent pregnancy tends to be associated with social disapproval, consequent stigmatization, shame, guilt, and other negative emotions (Peter et al., 2017). Pregnant adolescents who are not married and have no specific stable partner responsible for the pregnancy may experience criticism, rejection,

punishment, and in other words, experience expressed emotion which may trigger psychological distress.

Adolescent pregnancy can change a young mother's life; It puts her in a place where she is responsible for herself and another human being. Carrying a baby and becoming a mother creates physical changes; a woman equally undergoes mental and emotional changes. Young mothers face added stress, and though not all adolescent mothers are significantly affected by mental and physical change, many are. Similarly, factors such as age play significant roles in determining pregnancy-related stress levels. Research by Nall (2016) found that more than 6,000 Canadian women aged 15 to 19 years experienced postpartum depression at a rate twice as high as that for women aged 25 and above.

Objectives of the Study

The objectives of this study are to:

1. Investigate the influence of perceived expressed emotion on the psychological distress of adolescents.
2. Compare psychological distress of pregnant and non-pregnant adolescents.
3. Investigate age differences on psychological distress of pregnant adolescents

Research Questions

The following were the research questions:

1. To what extent does perceived expressed emotion influence psychological distress?
2. Are there differences in the level of psychological distress of pregnant and non-pregnant adolescents?
3. To determine age differences on psychological distress of pregnant adolescents.

Research Hypotheses

To answer the above-stated research questions, the following hypotheses were stated:

1. Perceived expressed emotion will significantly influence adolescents' psychological distress.
2. Pregnant adolescents will have significantly higher levels of psychological distress than non-pregnant adolescents.
3. Age differences would significantly influence psychological distress of pregnant adolescents.

Significance of the Study

The findings of this study will be beneficial to adolescents, Psychologists, Educators, Counsellors, Researchers, and Parents in the area of education and prevention of psychological distress that may arise due to the level of expressed emotion perceived by the adolescent from the parent or relatives and to identify when there is a problem.

Scope of the Study

This study is for all adolescents in Nigeria, but due to economy, time, materials, and money, 552 adolescents from Ogun State were involved in the study as a representative sample of all adolescents in Nigeria.

METHOD

Study Location

The study was carried out in Ogun state Nigeria. Pregnant adolescents in the major location in the state antenatal clinics are available in primary healthcare centres, while non-pregnant adolescents were recruited from some selected schools.

Participants

This study employed five hundred and fifty two (552) participants, which were female adolescents and were grouped into two, the first group was pregnant adolescents, and the second group was non-pregnant adolescents between the ages of 13 and 19 years. Pregnant adolescents were further categorized into two age groups. The first group is those below the mean age, while the other group is those above the mean age.

Sampling Technique

An accidental and purposive sampling method was used in selecting the participants in all the locations for this phase because of the accessibility of the population of interest. Accidental sampling was used for some selected locations. The locations were selected using purposive sampling because the researcher wanted representation across the selected age.

Design

This study employed a cross-sectional survey research design. The design was adopted because it involved participants across different age groups and statuses, and Questionnaires were used to elicit information.

Instruments

The instrument used for this study was the Perceived Expressed Emotion Scale and Kessler Psychological Distress Scale. Demographical information obtained is age and pregnancy status.

Perceived Expressed Emotion Scale (PEES)

This section measured perceived expressed emotion using the Perceived Expressed Emotion scale (PEES) developed by Hamzat, Aroyewun & Akinwale (2023). Perceived Expressed Emotion scale (PEES) is a 20 items self-reported scale designed to measure emotional climate and attitude within the family environment with a reliability coefficient of .743, a construct validity of .85, a convergent validity of .718, and divergent validity of -.215. The response is on a five Likert format ranging from strongly agree to disagree strongly, with a minimum score of 20 while the maximum score is 86. The psychometric property for this study is Cronbach Alpha ($\alpha=.82$)

Kessler Psychological Distress Scale (K10)

This section measured psychological distress using Kessler Psychological Distress Scale(K10) developed by Kessler, Barker, Colpe, et al.(2003) was a simple measure of psychological distress. The K10 scale involves ten questions about emotional states, each with a five-level response scale. The measure can be used as a brief screen to identify levels of distress. The tool can be given to patients to complete, or the questions can be read to the patient by the practitioner. The psychometric property for this study is Cronbach Alpha ($\alpha=.81$).

Data analysis

Statistical package for social sciences (SPSS Version22) statistical software was used to analyse the data generated for this phase. Responses obtained from all the questionnaires were coded,

stored, and analysed. Descriptive statistics were computed, and inferential statistics such as regression, t-test for an independent sample, and correlation analyses were used to test the hypotheses for the study.

RESULTS

Testing Of Hypotheses

Hypothesis 1: *Perceived expressed emotion will significantly influence adolescents' psychological distress.* This hypothesis was tested using hierarchical regression analysis.

Table 1: Summary of Hierarchical Regression Analysis

Models	Predictors	B	B	T	Sig	R	R ²	F	P
Model 1	Over Involvement	.53	.31	7.68	.00	0.31	.10	58.95	<.05
Model 2	Over Involvement	.30	.18	4.15	.00	0.42	.18	59.57	<.05
	Critical Comment	.42	.32	7.38	.00				
Model 3	Over Involvement	.23	.14	3.26	.00	0.47	.22	51.86	<.05
	Critical Comment	.15	.11	2.01	.04				
	Hostility	.48	.30	5.49	.00				

Dependent variable: Psychological Distress

Table 1 above shows the significant influence of perceived expressed emotion (over-involvement, critical comment, and hostility) on psychological distress. From the outcome, three models were formulated.

In the first domain, over-involvement significantly predicts psychological distress (B=.53, β =.31, R=.31, P<.05). This result showed that the over-involvement domain of perceived expressed emotion significantly has a .31 strength of relationship with psychological distress, contributing about .31 impact on psychological distress. Similarly, per unit change in the over-involvement brought about a 10% variance in psychological distress experienced by the participants.

In the second domain, when the critical comment has been added, both over-involvement and critical comments significantly predict psychological distress (R=0.42, R²=.18, P<.05). From this result, both over-involvement and critical comments of the domains of expressed emotion significantly contributed .42 relationships with psychological distress. Interestingly, per unit change in over-involvement and critical comments brought about an 18% variance in psychological distress experienced by adolescents.

In the third domain, when hostility has been added to the over-involvement and critical comments domain, the result showed that the factors (hostility, over-involvement and critical comments) jointly predict psychological distress (R=0.47, R²=.22, P<.05). As a result, hostility, over-involvement and critical comments jointly contributed about .47 relationships with psychological distress. Moreover, per unit change in the hostility, over-involvement and critical comments bring about 22% variances in psychological distress experienced by the adolescents. This result showed that perceived expressed emotion (hostility, over-involvement and critical comments) significantly influence psychological distress.

Generally, there was an increase in variance changes in psychological distress as adolescents experience more domain of expressed emotion. Therefore, hypothesis one is confirmed

Hypothesis 2: *There will be significant differences in the psychological distress of pregnant and non-pregnant adolescents.* This hypothesis was tested using a t-test for independent sample analysis.

Table 2; Summary of t-test for independent sample Analysis

Dependent Variable	Pregnancy Status	N	\bar{x}	Std. Dev.	T	F	P
	Psychological Distress						
Non- Pregnant		218	24.67	6.95			

From Table 2 above, the result showed a t-test for independent sample analysis on the influence of pregnancy status on psychological distress. The result shows that pregnancy status significantly influences the level of psychological distress ($t(552)=6.40$; $F=2.15$; $P<.05$). The result implies that adolescents' pregnancy status significantly influences their level of psychological distress experience.

Specifically, the adolescents who were pregnant ($\bar{x} = 28.92$; $SD = 8.04$) significantly experience more psychological distress than adolescents who were not pregnant ($\bar{x} = 24.67$; $SD = 6.95$). Therefore, hypothesis three is supported

Hypothesis 3: Age differences would significantly influence psychological distress. This hypothesis was tested using a t-test for independent sample analysis. The result is shown in table 4.8 below

Table 3: Summary of t-test on the significant differences in the categories of age of the participants on their psychological distress

Dependent Variables	Age Categories	N	Mean	Std. Dev.	F	T	P
Psychological Distress	Below average age	190	27.19	8.18	0.37	0.13	>.05
	Above average age	279	27.09	7.85			
Perceived Expressed Emotion	Below average age	190	55.56	11.94	0.92	0.23	>.05
	Above average age	279	55.28	13.29			

Note: participants who are 16years (average age) were excluded from the analysis.

From Table 3 above, the result showed a t-test for independent sample analysis on the influence of the age categories of the adolescents on expressed emotion and psychological distress. In the result, age categories did not significantly influence psychological distress ($t(469)=0.13$; $F=0.37$; $P>.05$). The result implies that age categories of the participants did not significantly influence or contribute to their experiences of psychological distress.

Additionally, age categories did not significantly influence perceived expressed emotion ($t(469)=0.23$; $F=0.92$; $P>.05$). The result implies that the age categories of the participants did not significantly contribute to their reported perceived expressed emotion. Therefore, hypothesis four is disconfirmed.

Further analysis is shown in table 9 on the influence of age differences on the domains of perceived expressed emotion (Over Involvement, Critical Comment, and Hostility).

Table 4: Showing the Summary of the t-test for independent sample Analysis on the significant differences in the categories of the age of the participants on the domain of perceived expressed emotion

Dependent variables	Age Groups	N	Mean	Std. Dev.	F	T	P
Over Involvement	Below average age	190	20.26	4.62	0.15	0.14	>.05
	Above average age	279	20.20	4.64			
Critical Comment	Below average age	190	18.74	5.39	5.07	0.69	<.05
	Above average age	279	18.35	6.22			
Hostility	Below average age	190	16.56	4.59	1.14	-0.35	>.05
	Above average age	279	16.72	5.05			

The average age is 16.64. Sample N=469

From Table 4 above, the result showed a t-test for independent sample analysis on the influence of the age categories of the adolescents on the domains of perceived expressed emotion. In the result, age categories did not significantly influence the over-involvement domain ($t(469)=0.14$; $F=0.15$; $P>.05$)

However, age categories significantly influence the critical comments domain ($t(469)=.69$; $F=5.07$; $P<.05$). The result implies that the age categories of the participants significantly influence their experiences of critical comment emotion. Specifically, adolescents who are below the average age of 16 ($\bar{x} = 18.74$; $SD = 5.39$) significantly reported more experiences of critical comments than an adolescent who is above the average age of 16 ($\bar{x} = 18.35$; $SD = 6.22$). This result shows that adolescents differ on the dimensions of perceived expressed emotion, explicitly in their critical comment domain.

On the other hand, the result depicts that age categories did not significantly influence the hostility domain of perceived expressed emotion ($t(469)=-0.35$; $F=1.14$; $P>.05$). The result implies that age categories of the participants did not significantly influence their experiences of hostility.

DISCUSSION

This research examines the relationship between perceived expressed emotion, age and psychological distress among pregnant and non-pregnant adolescents in Ogun state Nigeria.

The following are the major findings:

- (i) Adolescents perceived expressed emotions were found to influence influenced psychological distress.
- (ii) There are differences in the psychological distress of pregnant and non-pregnant adolescents.
- (iii) Age categories of pregnant adolescents did not influence their perceived expressed emotions except in the critical comments domain.

The study revealed that perceived expressed emotion significantly influenced psychological distress among adolescents; the study suggested that expressed emotion predicts psychological distress. It supported the study of Mpetshwa (2000), in which participants reported having experienced a lot of ill-treatment from their family members, especially their parents, who felt betrayed by their children getting pregnant and were no longer treated like other members of the family, as was the case before pregnancy, that pregnancy made them feel rejected by friends.

Furthermore, the study found that adolescent pregnancy predicts psychological distress; this implies that the pregnancy status of adolescents significantly influences their psychological distress experiences. Specifically, adolescents who are pregnant reported a high level of psychological distress than their peers who are not pregnant; this supported the study conducted by Lehana & Rhyn (2003) in Maseru, which showed that some social and psychological consequences accompany the transition to motherhood.

The study found no overall significant differences in perceived expressed emotion and psychological distress among the two age categories of pregnant adolescents. However, there were differences between the age categories of pregnant adolescents on the critical comment domain of expressed emotion. Pregnant adolescents who are 15 years and below reported more critical comments and psychological distress than those who are 17 years and above. This finding supported the study of Quinlivan et al. (2004), who found that pregnant adolescents have higher levels of psychological symptomatology compared to older pregnant women".

Conclusions

This study concluded that perceived expressed emotion can increase the level of psychological distress among pregnant adolescents, and that age categories have no relationship with the perceived expressed emotion among pregnant adolescents except in critical comments.

Recommendations

Given the findings of this study, the following recommendations are suggested:

1. Psychologists, health workers, parents, school authorities, and all the stakeholders in the area of child and adolescent development should ensure that young girls are well educated on sex education and the consequences of unintended and unwanted pregnancy during adolescents.
2. Awareness of expressed emotion is important so parents and family members will consolidate efforts geared toward giving adequate support to the pregnant adolescent and that their expression toward them determines how they will carry the pregnancy. The outcome of everything that has happened, we have to express our emotions positively to them, especially in critical comments, so that they can still give birth to the child and still find a meaningful future for themselves.

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